

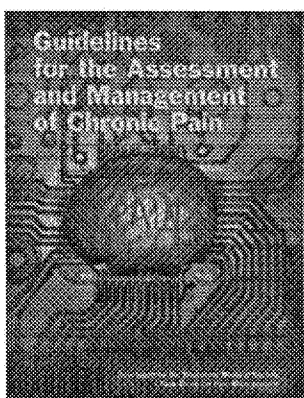
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Exhibit 674H

Guidelines for the Assessment and Management of Chronic Pain



Developed by the Wisconsin Medical Society
Task Force on Pain Management



"It is our hope that physicians and other practitioners will find these guidelines of value in recognizing the complexity of chronic pain and utilize these guiding principles to improve the management of individuals with chronic pain."

—Sridhar V. Vasudevan, MD,
Chair, Task Force on Pain
Management

Table of Contents

1. Introduction.....	15
2. The Chronic Pain Population.....	16
3. Chronic Pain Management.....	16
4. Initial Evaluation of the Patient with Chronic Pain	17
5. Developing and Implementing a Pain Management Plan	19
6. The Treatment Plan	19
7. Outcomes in Chronic Pain Management	20
8. Referral to Specialized Pain Centers	21
9. Guiding Principles of Treatment.....	21
A. Pharmacotherapy.....	21
B. Psychological Assessment and Therapies	26
C. Interventional Approaches	27
D. Rehabilitation Approaches	28
E. Surgical Approaches	29
10. Web Sites.....	29
11. References/Recommended Reading	30
12. Task Force Members	31
13. Appendices	32
I. Confidential Health Questionnaire	32
II. Equianalgesic Dosing Table.....	39
III. Guidelines for Treatment with Controlled Substance Applications.....	40
IV. Wisconsin Controlled Substances Laws and Regulations	42

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Guidelines for the Assessment and Management of Chronic Pain

These guidelines are designed to support quality health care and effective management of chronic pain throughout Wisconsin. They are intended to assist primary care physicians in their assessment and management of patients with persistent pain. The strategies outlined herein are not intended to be all-inclusive, but to suggest approaches that should be useful to physicians and non-physician clinicians to enable them to manage patients with chronic pain more effectively.

Pain is defined as an “unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage.” When pain persists beyond the usual period of healing after injury, significant physical, psychological, and social disability may result. It is estimated that more than 60 million people in the United States suffer from persistent or recurrent pain sufficiently intense to impact their lives adversely. Chronic pain causes untold physical and emotional suffering and costs billions of dollars each year in lost productivity, lost income, and increased health care and disability costs.

Despite the ubiquity of chronic pain, many physicians find people with pain difficult to diagnose and treat. In many cases the origin of the pain is complex and not easily understood. Some patients have psychological problems that complicate management. In some cases, physicians have been hesitant to use the full spectrum of available analgesics because of limited familiarity with the drugs and their effects. Opioid analgesics, in particular, may raise concerns about regulatory oversight or undue fears that patients will develop addiction. Such hesitancy can unnecessarily deprive some patients of medically necessary interventions that would improve their function and quality of life.

To address these issues, the Wisconsin Medical

Society formed a Task Force on Pain Management in 2002 and charged it to study chronic non-cancer pain. The Task Force’s mission was to formulate and write guidelines for the evaluation and management of patients with chronic pain. The guidelines, presented here, are intended to assist primary care physicians in assessment and management of their patients with chronic pain. However, other physician specialists and non-physician clinicians may find this up-to-date consensus statement useful in their practices. Key elements include the importance of an open approach to the patient with chronic pain, with consideration of the multiple causes of and reasons for maintenance of pain; careful documentation and communication among treating professionals; and development of a clear treatment plan that emphasizes patient responsibility and self-management skills. Consultation with specialists in pain medicine, addiction medicine, anesthesiology, psychology, psychiatry, physical medicine and rehabilitation, surgery or other disciplines may be used and should be incorporated into the patient’s treatment plan.

Many different treatment strategies are employed in pain management. The task force explored indications for and use of various treatments, including pharmacological therapies, psychological therapies, interventional approaches, rehabilitation approaches, and surgery. Summaries of each of these therapies are presented in this document.

It is beyond the scope of any single document to address all aspects of the evaluation and treatment of patients with chronic pain, but it is the goal of the task force that this document will familiarize physicians and non-physician clinicians with the most important concepts and standards for evaluation and treatment of these patients. For further information, the reader is referred to the references that are cited on page 30.

The Chronic Pain Population

Definition

Chronic pain is defined as persistent pain, which can be either continuous or recurrent and of sufficient duration and intensity to adversely affect a patient's well being, level of function, and quality of life.

Many patients with chronic pain may also demonstrate:

- Progressive deterioration in ability to function at home, at work, and in social situations
- Increased dependence on the health care and/or insurance systems (diagnostic workups, imaging, medications, interventional procedures)
- Sleep disturbances
- Mood disturbances such as anxiety and depression
- Involvement with medical legal issues, particularly in cases of accidental or work-related injury
- Additional comorbidities that may be seen include:
 - ◆ Deconditioning
 - ◆ Disuse of affected body part(s)
 - ◆ Difficulty adhering to recommended treatment
 - ◆ Disability that far exceeds physical/medical findings
 - ◆ Drug misuse/abuse

Chronic pain may involve any body part or organ system. Common examples of chronically painful conditions include, but are not limited to, the following:

- Osteoarthritis and rheumatoid arthritis
- Spinal pain—lumbar, cervical, thoracic—with or without radiculopathy
- Complex regional pain syndrome (reflex sympathetic dystrophy)—upper or lower extremities
- Fibromyalgia syndrome (generalized musculoskeletal pain)
- Spondylarthropathies such as ankylosing spondylitis
- Myofascial pain syndrome (regional muscle pain)
- Painful peripheral neuropathy
- Temporomandibular joint (TMJ) dysfunction
- Postherpetic neuralgia
- Headache—migraine, tension, cluster, cervicogenic, etc.

Chronic Pain Management

Definition

Management of chronic pain is a process wherein patient, physician, and non-physician clinician work together to improve function, reduce pain, develop self-management skills, and maintain those improvements

over time. This process requires **active participation** by the patient (and significant others in the person's life) and **open ongoing communication** among all practitioners involved in the treatment process.

Initial Evaluation of the Patient with Chronic Pain (Assessment and Diagnosis)

Key Principles

- Recognize the multiple dimensions of chronic pain—biological, psychological, behavioral, familial, vocational, social, and medical legal.
- Identify and understand the nature of the patient's problem and, where possible, the cause of the pain.
- Identify and understand comorbid conditions that may affect treatment.
- Identify and understand the patient's expectations and goals.

Because chronic pain affects multiple aspects of living, accurate multidimensional diagnosis is a prerequisite for effective chronic pain management. A comprehensive evaluation should address medical, physical, and psychosocial issues.

The treating physician should have a thorough knowledge of various common chronic pain conditions and appropriate management options. While these topics are outside the scope of the present document, the references and appendices provide a starting point for practitioners interested in acquiring this knowledge.

Depression and anxiety are common comorbidities of chronic pain, either preexisting or as complications of the pain itself. These disorders often require consultation with a behavioral health specialist and/or psychiatrist. Addiction is not commonly seen during chronic pain management, but may exist prior to onset of pain or may develop during the course of a painful disorder, and clinicians should assess for its presence prior to the onset of treatment with controlled substances, and assess for signs of addiction during the course of chronic treatment with opioid analgesics or benzodiazepines.

History

The history, when properly obtained, can provide information about both the physical and psychological aspects of pain. It should include:

- **Pain history**
 - ♦ Chronology of the presenting complaint
 - ♦ Mechanism of onset

- **Characterization of pain**
 - Location of pain; referral/radiation
 - Quality of pain (stabbing, burning, aching, etc.) A pain diagram can be very useful here. This simple tool helps characterize the location and nature of the pain (Appendix I)
 - Intensity of pain: a numeric pain rating scale (0 = no pain; 10 = worst pain imaginable) provides a frame of reference
 - Duration of pain
 - Aggravating and relieving factors
 - Additional symptoms—motor, sensory and autonomic changes
 - Impact of pain on sleep, mood, work, activities of daily living, social function
 - Special needs of elderly patients and those with dementia (Table 1)
- **History of treatment**—Previous surgical, pharmacological, physical, psychological, and other treatments and their effectiveness
- **Psychological history**—Screen for anxiety and depression, addiction, somatoform disorder, personality disorder, other prior psychiatric diagnoses, coping style, and personality traits
- **Vocational and medical legal issues and related expectations**
- **General medical history**
- **Patient's ideas about the cause of pain**
- **Patient's goals for evaluation and treatment**—Preprinted forms can be helpful in acquiring the pain history. Patients may complete the form in advance, which saves time during the interview. An example is included in Appendix I.

Examination

A comprehensive examination of each patient is recommended, with direct examination of the painful area(s).

Where appropriate, the comprehensive examination may include:

- **Musculoskeletal examination:**
 - ♦ Posture
 - ♦ Gait

Table 1. Key Points in Assessing Aging Patients

Recognition that words such as "burning," "discomfort," "aching," "soreness," and other terms may be substituted for "pain," per se.

Cognitive and language impairments are common, necessitating interpretation of nonverbal and vocalized pain behaviors, as well as eliciting a history of recent changes in function, as indicators of pain.

Detailed evaluation of activities of daily living (ADLs) and performance measures of function.

Influence of persistent pain on mood and psychological function, utilizing age-specific scales (e.g., Geriatric Depression Scale).

Persistent medical conditions and medication use that influence persistent pain and treatment alternatives.

Source: American Medical Association. *Pain Management, Part 2: Assessing and Treating Pain*. 2003. Reprinted with permission.

- Joint examination—symmetry, range of motion, size, ligamentous stability, provocative maneuvers
- Spinal examination—symmetry, range of motion, focal tenderness, provocative maneuvers
- Muscular examination—symmetry, tenderness, tender points (for fibromyalgia), trigger points (taut bands or "knots" palpable in muscle)
- Strength
- Neurological examination:
 - Mental status
 - Cranial nerves
 - Sensation—touch, pressure, pinprick, heat, cold, vibration. In neuropathic pain, there may be findings of decreased sensation or of increased response to painful stimuli (hyperalgesia). Pain from normally nonpainful stimuli is called allodynia.
 - Reflexes—deep tendon, pathological
- Psychological examination:
 - Basic screening for depression, anxiety, substance abuse can be conducted during the history interview.
 - For patients with complex pain problems and/or significant prior psychiatric histories, a detailed psychological evaluation, conducted by a psychiatrist or psychologist, is recommended.
 - For pain patients with a history of alcohol or other drug addiction, an evaluation by a certified addiction counselor or an addiction medicine physician is recommended prior to the initiation of chronic opioid analgesic therapy.
- Assessment of function—abilities and deficits.

Diagnostic Testing

These tests serve as an extension of the history and physical examination.

- Radiological studies (plain radiographs, CT, MRI, nuclear medicine, others)
- Electrodiagnostic studies (electromyography, nerve conduction studies, others)
- Diagnostic nerve blocks
- Psychological testing

- Laboratory testing
- Functional assessment (patient self-report and/or objective evaluation of mobility, self-care, physical performance; patient self-report of vocational, social, familial, sexual function)

Testing should be performed by appropriately trained personnel. Testing should be ordered selectively and only when the answer to the following questions is "yes":

1. Will testing help formulate the clinical diagnosis?
2. Will testing impact treatment?

Diagnosis

The diagnosis summarizes the above findings into a coherent statement that identifies the type and scope of the problem. As chronic pain affects multiple dimensions of life, the diagnostic impression should comment on all of these. The components of a multidimensional pain diagnosis include:

- Primary diagnoses (ICD-9)—what is causing the pain
- Medical comorbidities (listed as diagnoses) when present
- Psychiatric comorbidities (listed as diagnoses) when present; include a multiaxial (DSM-IV) diagnosis where pertinent
- Impact of pain on function

Developing and Implementing a Pain Management Plan

Key Principles

- Whenever possible, intervene early.
- Identify specific and realistic goals for therapy.
- Define what will be done and the time required to reach each goal.
- Identify the rationale for each treatment and who will be involved.
- Physician and non-physician clinician should agree upon the treatment plan and work toward the same goals.
- Use a combination of therapeutic interventions to obtain the best outcome.
- Document treatments and measure progress against the treatment plan.
- A simple ABCDE mnemonic from the Agency for Health Care Policy and Research illustrates key elements for assessment and management (Table 2).

Chronic pain management can be carried out in many different ways and according to many different treatment philosophies. Treatment approaches used as components of a multidisciplinary pain management plan are outlined in subsequent sections of this Guideline.

For many patients, a combination of therapies (e.g., rehabilitation, pharmacotherapy, interventional therapy, behavioral therapy, surgery) is the most success-

Table 2. ABCDE for Pain Assessment and Management

Ask about pain regularly. Assess pain systematically.
Believe the patient and family in their reports of pain and what relieves it.
Choose pain control options appropriate for the patient, family, and setting.
Deliver interventions in a timely, logical, and coordinated fashion.
Empower patients and their families. Enable them to control their course to the greatest extent possible.

Source: Jacox AK, Carr DB, Payne R et al. Management of cancer pain. Clinical Practice Guidelines. No. 9. AHCPR Publication No. 94-0592. Rockville, MD: Agency for Health Care Policy and Research, Public Health Service, US Department of Health and Human Services; March 1994.

ful approach. Generally speaking, earlier treatment is associated with a better outcome.

No matter what treatment approach is used, the same key principles apply. Pain management should have defined goals and time frames for achieving those goals. Develop measurable and realistic goals. Chronic pain management should have the reasonable expectation of decreasing pain when possible, and of improving function for the individual with chronic pain.

The Treatment Plan

Develop a written plan before starting treatment. Share the plan with the patient and all team members, and review and revise periodically as necessary. The plan should:

- Take all dimensions of the diagnostic impression into account
- Clearly define the patient's overall condition
- Define treatment goals and expectations
 - ◆ Goals should be "SMART"
 - S - Specific
 - M - Measurable
 - A - Achievable
 - R - Realistic
 - T - Time based
 - ◆ Outline specific goals with the patient at the outset:
 - Restore function
 - Reduce pain
 - Improve sleep
 - Improve coping skills
 - Reduce affective distress
 - Return to work
 - Others—specify
 - ◆ Determine and address patient's expectations. Are they realistic?
 - ◆ Communicate physician's expectations
 - Attendance
 - Adherence to treatment regimen

- Documentation of progress
- Understanding of the difference between **active treatment** (designed to eliminate/alleviate or cure the underlying pain problem or substantially improve function) and **maintenance treatment** (stable state, palliation/symptom control, only small changes expected). *The term maintenance treatment as used here should not be confused with methadone maintenance in narcotic treatment programs.*
- Patient and physician together should define:
 - ◆ How each goal will be reached and who is responsible
 - ◆ Beginning and end point—when should active treatment stop? Ongoing treatments that do not provide demonstrable benefits are not productive for physicians or for patients, and actually could have adverse health and economic consequences. Examples of end points include:
 - Planned outcomes are achieved.
 - Patient reaches stable state.
 - Patient is independent in self-management.
 - Patient is unable to adhere to the program, or treatment is unsuccessful.
 - The physician is unable to help the patient in

the current situation, in which case appropriate alternate or specialty treatment is recommended.

Monitor and Document Care

- All individuals involved in a patient's care should document treatment goals, duration, type, and response each time treatment is carried out.
- Set a schedule for periodic reevaluation. If a treatment team is involved, a team conference format is helpful; team members meet to discuss the overall treatment plan and the patient's progress.
- Reevaluation should document the patient's progress toward established goals. Treatment is successful if it results in a decrease in level of symptoms, an increase in level of function, or both. Changes in the treatment plan, rationale for changes, and areas of improved function should be noted.
- There should be regular communication among all treating physicians and other health professionals. This avoids duplication of effort and maintains a consistent structure for treatment.
- Remember, the goal is to establish the patient's ability to self-manage their symptoms.

Outcomes in Chronic Pain Management

Maintain accurate and complete records of pain treatment and its effectiveness. Outcomes may include:

- Pain reduction
- Improved physical function—ability to perform various activities and exercises
- Improved psychosocial function—resumption of family/home roles, activities of daily living, activities outside the home
- Improved sleep
- Reduced depression or anxiety
- Return to work or resumption of full duty work or with restrictions (where applicable)
- Change in medication use—decreased use, or appropriate use of effective medications to improve function
- Increased ability to self-manage residual pain and related problems

- Reduced utilization of pain-related health care services—fewer clinic or emergency visits, fewer phone calls, improved self-reliance
- Resolution of medical legal claims by providing information to assist in “case closure”

Pain outcomes can be difficult to quantify, as many of them are most easily measured in terms of qualitative statements, e.g. “I feel better.”

- Pain intensity can be assessed with a numeric scale (0-10) or other validated, reliable rating scale(s).
- Functional improvement is more difficult to quantify, but can be measured. Whenever possible, pain treatment outcomes should be assessed on the basis of objective measures of function, e.g., physical capacity ratings (lifting, bending, carrying, walking speed).

Referral to Specialized Pain Centers

When a physician is unable to provide effective pain management for a particular patient, referral to a specialty pain center may be appropriate. Reasons for referral include:

- Diagnostic assistance
- Advice on suitability of present treatment
- Treatment planning for initial and long-term pain management
- Comprehensive management: Pain center manages

patient until stable; pain care is then returned to the referring physician

- Advice on optimal pharmacotherapy

Patients referred to specialty pain centers should undergo a comprehensive evaluation by a physician and a psychologist with training and experience in pain management. These evaluations may include a multiaxial psychiatric diagnosis.

Guiding Principles of Treatment

PHARMACOTHERAPY

Medications are critical elements of a comprehensive pain treatment plan. They are often used in conjunction with other interventional, surgical, psychological and rehabilitation treatment modalities. Pharmacotherapy for the pain patient may be specifically directed at pain or at depression, anxiety, or other comorbid conditions. Effective treatment of depression and anxiety may reduce the need for analgesics. Conversely, relief of pain may significantly reduce depression and anxiety.

- A thorough medication history is critical to the development of an effective treatment plan.
 - ◆ Be sure to assess use of over-the-counter drugs and herbal preparations.
 - ◆ Look for drug-related fears or misconceptions, as they may lead to poor adherence to a therapeutic regimen.
- All drugs have risks and benefits. Physicians should:
 - ◆ Have a thorough knowledge of each drug's pharmacology
 - ◆ Know how to manage side effects
 - ◆ Regularly monitor drug efficacy and side effects
- Define the goals of drug therapy before prescribing. What constitutes a desirable outcome—less pain, better function, both? How much improvement is desired?
- Base the initial choice of analgesic on the severity and type of pain. Remember that patients may have more than one site or type of pain.
 - ◆ Severity—mild, moderate, severe
 - ◆ Type—nociceptive, inflammatory, neuropathic

- Give drugs an adequate therapeutic trial. When treating inflammatory or neuropathic pain, benefits may take weeks or longer to appear.
- Give adequate doses, and titrate to the dose that relieves pain without producing dose-limiting side effects.
- Two or more drugs with complementary mechanisms of action may provide greater pain relief with less toxicity and possibly lower doses of each drug (rational polypharmacy). Don't prescribe two drugs in the same class at the same time; instead, strive for complementarity. For example, chronic pain associated with arthritis may respond well to a combination of opioid and anti-inflammatory therapy.
- Be alert for possible interactions with other drugs the patient is taking for other indications, e.g., the additive sedative effects of drugs.
- Add non-drug therapies to maximize pain relief while decreasing side effects.
- Remember that while the development of addiction is unlikely during a course of pain treatment, it can occur. Physicians should assess for indicators of addiction during a course of opioid therapy.
- Consider disease-modifying treatments, e.g., bisphosphonates for patients with pain related to osteoporosis.
- Taper and discontinue drugs that don't meet your treatment goals. If a drug does not produce the desired therapeutic outcome, there is no need to continue it. This practice helps to prevent expensive and potentially dangerous polypharmacy.

Drugs Used in Pain Management

The major classes of drugs used in pain management are:

- Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)
- Acetaminophen
- Opioids
- Adjuvant Agents/Neuromodulators
- Others

NSAIDs

NSAIDs include: non-selective cyclooxygenase (COX)-inhibitors such as aspirin, ibuprofen, naproxen, sulindac, diclofenac, piroxicam and COX-2 selective inhibitors such as celecoxib, rofecoxib, and valdecoxib.

Indications

- For mild to moderate nociceptive or inflammatory pain. Some NSAIDs are helpful in severe chronic inflammatory conditions. There is no evidence for their efficacy against neuropathic pain.

Dosing

- All have an analgesic ceiling, i.e., a maximum effective dose that is specific for each drug.

Side effects

- All drugs in this class have potentially significant end-organ toxicity.
 - ◆ Gastritis/peptic ulcer/esophagitis-duodenitis/GI bleeding
 - The selective COX-2 inhibitors appear to have fewer gastrointestinal side effects
 - ◆ Easy bleeding or bruising due to inhibition of platelet aggregation (especially with aspirin, which irreversibly inhibits platelet function)
 - The selective COX-2 inhibitors do not affect platelets and do not affect bleeding time
 - ◆ Renal insufficiency or failure
 - ◆ The elderly are at special risk for NSAID toxicity and should be carefully monitored and started on the lowest recommended dose.
 - ◆ There has been concern that COX-2 selective inhibitors may increase the risk of cardiovascular events. Further studies are needed to determine the magnitude of the risk.
 - ◆ Ibuprofen has been found to interfere with the cardioprotective effects of low dose aspirin; other non-selective NSAIDs have not been studied.
 - ◆ Selective COX-2 inhibitors do not appear to interfere with the cardioprotective effects of low dose aspirin.
 - ◆ Avoid aspirin in children and teenagers with influenza or chickenpox due to possible development of Reye's syndrome.

Acetaminophen

- Acetaminophen is hepatotoxic at higher doses; alcoholics are at special risk.
- Restrict intake to 4 g/24 hours (equivalent of eight 500-mg tabs).
- Use caution with combination analgesics (e.g., hydrocodone/acetaminophen or oxycodone/acetaminophen) as they contain variable amounts of acetaminophen. Monitor the total acetaminophen dose.
- Overdose is an emergency, and may require use of activated charcoal to prevent absorption and therapy with N-acetylcysteine.
- Long-term acetaminophen therapy may increase the risk of later renal disease. Monitor both hepatic and renal function.

Patients on chronic NSAID or acetaminophen therapy may require periodic reexamination and monitoring to avoid toxic side effects. Recommended tests include:

- NSAIDs—Abdominal exam, hemoglobin, BUN/creatinine, stool occult blood
- Acetaminophen—transaminases/alkaline phosphatase, BUN/creatinine

Opioids

These derivatives of the opium poppy, *papaver somniferum*, are among the oldest and most effective analgesics known. After prolonged debate, many specialists agree that opioid analgesics, when carefully used in appropriate patients, have a place in chronic pain management.

Examples include morphine, hydromorphone, oxycodone, codeine, hydrocodone, methadone, propoxyphene, controlled-release morphine and oxycodone, fentanyl, and tramadol.

Indications

- Pain of any type and duration. Opioids are more effective in nociceptive/inflammatory pain, but also have efficacy in neuropathic pain.
- Opioids are available in many dosage forms and for administration by a variety of routes—oral, injectable, transdermal, rectal, inhalation, oral transmucosal.

Certain opioids have significant limitations.

- Codeine: Side effects limit dose and thus efficacy. Codeine is a pro-drug; approximately 10% of Caucasians lack the enzyme needed to metabolize it to morphine and may not get pain relief from the drug.

- **Meperidine:** Meperidine is not recommended for use with chronic pain. It has a short duration of analgesic action (only 2-3 hours); long-lived metabolite, which is neurotoxic and can cause seizures, and may accumulate, especially when renal function is impaired.
- **Propoxyphene:** Propoxyphene is a relatively weak analgesic with limited efficacy; it may cause serious central nervous system side effects, especially in the elderly. It is a drug to avoid in the elderly.
- **Mixed agonist-antagonists (e.g., pentazocine, butorphanol, nalbuphine):** These have multiple limitations; may worsen pain by inducing a withdrawal syndrome in a person physically dependent on opioid agonists.

Some opioids have unique characteristics.

- **Tramadol** has weak opioid activity, and also potentiates serotonin and norepinephrine activity. It has an analgesic ceiling. Use of tramadol with selective serotonin reuptake inhibitors (SSRIs) may increase the risk of seizures and the "serotonin syndrome."
- **Methadone**, because of its significant lipid storage, is very long-acting when administered chronically; it must be titrated slowly, and is non-euphoric during chronic administration. It may have some indirect effects that reduce neuropathic pain. It is an excellent analgesic, but is often misunderstood by patients and physicians because of its use in addiction treatment.

Dosing

- Opioids have varying potencies and durations of action; knowledge of opioid pharmacokinetics is essential.
- Use long-acting agents for continuous pain and develop a plan for managing breakthrough pain ("rescue dosing") with short-acting agents.
- There is no dose ceiling for many opioids. Start with a low dose and assess response to the analgesic regimen; you may need to adjust the dose and/or change drugs to provide relief of pain while minimizing side effects.
- When increasing the dose of opioids, increase by a percentage of the current dose: 25%-50% for mild pain, 50%-100% for severe pain.
- Methadone is difficult to titrate because it has a short half-life during acute administration but a long and variable half-life with chronic administration. In office practice, methadone dose should not be increased more frequently than every 10-14 days, because the drug may take that long to reach a steady-state level in the body.
- Use equianalgesic dosing principles when changing from one opioid to another. An equianalgesic dosing table is provided in **Appendix II**.

Side Effects

- There is no evidence for major end-organ toxicity during long-term therapy; for many opioids, there may not be a ceiling dose.
- Side effects are predictable and controllable. They include, but are not limited to, constipation, nausea and vomiting, sedation, and itching. Tolerance to most side effects may develop in a week (excluding constipation). Approaches commonly used to manage opioid side effects are presented in **Table 3**.
- **Every patient given an opioid on a chronic basis should be on a bowel management regimen.** Choices include docusate (1-4 caps/day); senna concentrate (2 tabs/day to start); bisacodyl suppositories (10 mg pr daily-every other day). High fluid intake may be helpful. Fiber supplementation helps some patients, but could worsen constipation in patients taking opioids.
- Side effects may be less with one opioid than with another.
- Serious side effects such as delirium or respiratory depression can occur if the dose is increased too quickly, especially in an opioid-naïve individual.
- There are no data to assess the risk of subtle neuropsychological impairment with long-term use.
- There are no conclusive data on the effects of opioid therapy on driving performance. Some studies describe decrements in performance; others find no decrement once a patient has adjusted to the regimen. Careful judgment should be used in each case.

Tolerance, Physical Dependence, and Addiction

There is confusion about the meaning and significance of the following terms:

- **Tolerance** occurs when a higher dose of a drug is required to achieve the same effect. Tolerance to opioid analgesia does not occur in all individuals. If tolerance does occur, consider first increasing the dose. If this is unsuccessful or repeated dose increases are needed, consider switching to another opioid as there may be incomplete cross-tolerance among these drugs.
- **Physical dependence** means that the abrupt cessation of a drug or the administration of an antagonist will induce a physiologic "withdrawal syndrome." Chronic use of many medications, including steroids, some antihypertensives, and opioids, may result in physical dependence. Physical dependence is not synonymous with addiction, and is expected with chronic opioid therapy. When stopping opioids, taper the dose slowly to prevent withdrawal symptoms.
- **Addiction** is "a compulsive disorder in which an in-

Table 3. Commonly Used Approaches in the Management of Opioid Side Effects

Opioid Side Effect	Treatment
Constipation	General Approach Increased fluid intake and dietary fiber Encourage mobility and ambulation if appropriate Ensure comfort and convenience for defecation Rule out or treat impaction if present Pharmacological Approach Contact laxative plus stool softener (e.g., senna plus docusate) Osmotic laxative (e.g., milk of magnesia) Lavage agent (e.g., oral propylene glycol) Prokinetic agent (metoclopramide) Oral naloxone
	Pharmacological Approach If associated with vertiginous feelings, antihistamine (e.g., scopolamine, meclizine) If associated with early satiety, prokinetic agent (e.g., metoclopramide) In other cases, dopamine antagonist drugs (e.g., prochlorperazine, chlorpromazine, haloperidol, metoclopramide)
Nausea	General Approach Hydrate as appropriate Progressive alimentation Good mouth care Correct contributory factors Adjust medication Pharmacological Approach If associated with vertiginous feelings, antihistamine (e.g., scopolamine, meclizine) If associated with early satiety, prokinetic agent (e.g., metoclopramide) In other cases, dopamine antagonist drugs (e.g., prochlorperazine, chlorpromazine, haloperidol, metoclopramide)
Somnolence Or Cognitive Impairment	General Treatment Reassurance Education Treatment of potential etiologies Pharmacological Approach If analgesia is satisfactory, reduce opioid dose by 25% to 50% If analgesia is satisfactory and the toxicity is somnolence, consider a trial of a psychostimulant (e.g., methylphenidate)

Source: American Medical Association. *Pain Management: Part 4: Cancer Pain and End-of-Life Care*. 2003. Reprinted with permission.

dividual becomes preoccupied with obtaining and using a substance, the continued use of which results in a decreased quality of life." It has also been described as "a primary, chronic disease with genetic, psychosocial and environmental factors influencing its development and manifestations, characterized by impaired control over drug use, continued use despite harm, and craving." The risk of addiction is considered low in patients who have no history of substance abuse; patients with a prior history of alcohol or other drug addiction may still be candidates for treatment with opioids, but patients with previous substance abuse diagnoses or treatments warrant special care when treated with opioids.

- Monitor patients on chronic opioid therapy for behaviors suggestive of addiction. (Table 4)
- Wisconsin Controlled Substances Laws and Regulations are presented in Appendix IV.

Antidepressants

The tricyclic antidepressants (TCAs), e.g., amitriptyline, desipramine, doxepin, and nortriptyline are effective against neuropathic pain. (SSRIs such as fluoxetine, sertraline, paroxetine, citalopram, are helpful in treating the depression that frequently accompanies pain, but are not analgesic.) TCAs may also be useful for the treatment of insomnia.

Dosing

- Start low and go very slowly, over periods of weeks and months. Consider a starting dose of approximately 10-25 mg each night. Start even lower with elderly patients.
- Baseline ECG is indicated in patients at risk for cardiac conduction problems.
- Therapeutic range may be from 50-150 mg per day; again, it may be lower with elderly.
- Consider avoiding amitriptyline in the elderly (anticholinergic side effects).
- Analgesia may take weeks or longer to develop. Sedation may be useful to normalize disturbed sleep.

Side Effects

- Common side effects are sedation, dry mouth, constipation, urinary retention.
- TCAs may cause cardiac conduction defects or arrhythmias.
- If discontinuation is planned, taper these drugs slowly.

Anticonvulsant or Antiepileptic Drugs (ACDs or AEDs)

These agents are very effective in the treatment of neuropathic pain. First generation drugs such as car-

Table 4. Problems Suggestive of Addiction Associated with Chronic Opioid Therapy**Adverse consequences of opioid use**

- Decreased functionality
- Observed intoxication
- Negative affective state

Impaired control over medication use, compulsive use

- Failure to bring unused medications to appointments when asked to do so
- Unsanctioned dose escalation
- Requests for early prescription renewals
- Reports of "lost" or "stolen" prescriptions
- Appearance at clinic without appointment and in distress
- Frequent visits to emergency departments to request drugs
- Family reports of overuse or intoxication

Craving, preoccupation with opioids

- Fails to comply with nondrug pain therapies
- Fails to keep appointments
- Shows interest only in relief of symptoms, not rehabilitation
- Reports no effect of nonopioid interventions
- Seeks prescriptions from multiple providers

* Note that any of these behaviors may occur from time to time in patients being treated for pain, particularly patients with inadequate pain treatment. A constellation of continuing behaviors should prompt further assessment for possible addiction.

Source: American Medical Association. *Pain Management, Part 1: Overview of Physiology, Assessment, and Treatment*. 2003. Reprinted with permission.

gabapentine, phenytoin, and valproic acid and also newer, second generation drugs such as gabapentin, lamotrigine, topiramate, or zonisamide may be useful. Many of the newer agents are less toxic, require less therapeutic monitoring, and have a wider dosing range than the older drugs. Some are useful as "mood stabilizers" in bipolar disorder, agitated depression, and other conditions. Prescription for this purpose should be coordinated with a psychiatrist. Gabapentin is the only second generation anticonvulsant approved for the treatment of postherpetic neuralgia.

Dosing

- Dosing varies from drug to drug. Consider starting with a very low dose. Titrate up incrementally over weeks. Most drugs can be titrated weekly.
- Gabapentin can be titrated more rapidly, as often as every 24-48 hours. Titration should be stopped when benefit is achieved or side effects become a problem.

Side Effects

- Most side effects are related to the central nervous system, such as dizziness, sedation, cognitive difficulties.

- Some side effects are drug-specific (e.g., renal stones and paresthesias for topiramate; skin rashes for lamotrigine; myelosuppression for carbamazepine). Know the side effects thoroughly before prescribing.
- For older agents, blood levels should be checked periodically.
- When discontinuing these drugs, they should be tapered slowly to avoid withdrawal seizures or other side effects.

Topical Agents

Topical therapies for neuropathic pain may be helpful for continuous pain/dysesthesias caused by peripheral nerve injury.

- Capsaicin preparations have potential value. Capsaicin causes local burning, which may be severe; it should be applied several times daily for approximately 6 weeks for full effectiveness.
- Lidocaine patches may be useful for the treatment of postherpetic neuralgia and other cutaneous dysesthesias.
- Counter-irritant ointments or liniments, many containing menthol, may be helpful for musculoskeletal pain. Compounded ointments or gels containing NSAIDs, tricyclic antidepressants, or anticonvulsants can also be helpful.

Other Adjuvants

- Corticosteroids may be useful for treatment of severe inflammatory pain. They can be administered systemically or locally. Systemic administration may be limited by serious potential side effects. Consider using the lowest effective dose for the shortest possible time period to minimize adrenal cortical suppression.
- Baclofen may be used in the treatment of lancinating, paroxysmal neuropathic pain. It also may help to reduce painful spasticity.
 - Consider starting at 5 mg at night, titrate to a maximum of 20 mg 4 times daily; side effects may include nausea, dizziness, confusion, drowsiness, hepatotoxicity.
- Tizanidine is another antispasticity agent with some usefulness in neuropathic pain. It may also be helpful in fibromyalgia, but evidence is anecdotal.
 - Consider starting at 2 mg at night, titrate to a maximum of 4-8 mg 3 times/daily. Side effects are similar to those of baclofen.
- "Muscle relaxants" are a heterogeneous class of drugs that may reduce muscle pain and often induce sedation. These drugs may be helpful for short-term use, as in pain flares or acute injury.

Long-term use is not recommended. Carisoprodol is not recommended. One of its metabolites is meprobamate, a non-barbiturate sedative.

- Triptans—(almotriptan, eletriptan, frovatriptan, rizatriptan, sumatriptan) are examples of drugs that can be specifically used in the treatment of migraine headaches.

Anxiolytics

- The SSRIs are the drugs of choice for the treatment of severe anxiety disorders. However, they have a relatively slow onset of action, so therapeutic effects may not be observed until 2-6 weeks after beginning treatment.
- Benzodiazepines are useful in situations that involve relatively acute anxiety reactions because their onset of action may be relatively quick (can be measured in minutes to hours). They can impair cognition and skilled motor function.
 - Physical dependence will develop with long-term use with benzodiazepines; therefore, taper slowly when stopping the drug to prevent symptoms of withdrawal. Addiction rarely develops in patients treated with benzodiazepines, except in patients with a past history of addiction. (Patients should be asked specifically about a past history of benzodiazepine or alcohol misuse or addiction.)
- Buspirone is a relatively novel agent that may be useful for mild to moderate anxiety—though its benefits may be greater after several weeks of therapy at an adequate serum level—in contrast to benzodiazepines, whose effects may be noted by patients in minutes to hours.

Drugs for Insomnia

Insomnia should be treated initially by correcting any remediable contributing factors. Sleep disorders, including sleep apnea, are common causes of insomnia; they should be ruled out or, if found, treated.

Other approaches to addressing insomnia include:

- Discontinuing caffeine use.
- Observing good sleep hygiene, i.e., establish daily habits that promote sleep and minimize daily habits that interfere with sleep.

Relief of pain frequently leads to improved sleep.

- Several over-the-counter drugs contain sedating antihistamines. Although these are widely used by the public, their efficacy has not been established.
- Sedative antidepressants such as trazodone (which is quite sedating but weakly antidepressant) may be useful.

- Benzodiazepines may be useful for short-term management of insomnia. Common agents include triazolam, temazepam, oxazepam, and selective benzodiazepine receptor agonists (zolpidem, zaleplon).
 - Benzodiazepines may worsen sleep apnea; long-term use may lead to rebound insomnia.
 - Benzodiazepines may cause physical dependence and should be tapered to prevent a withdrawal syndrome.
 - There is possible risk of respiratory depression and death if combined with alcohol or other sedatives.

PSYCHOLOGICAL ASSESSMENT AND THERAPIES

The focus of psychological/psychiatric services with chronic pain patients is two-fold: differential diagnosis and direct treatment.

Diagnostic Responsibilities

This task includes the comprehensive assessment of patients prior to treatment. Determinations involving suitability for rehabilitative care, special precautions during the course of treatment and candidacy for surgical and interventional anesthesiology procedures may be considered specific referral questions. Proper selection of patients for therapy with short- and long-acting opioid analgesics is also a specific referral issue to be addressed. Patients with major psychiatric illness or active substance abuse problems may not be suitable candidates for pain treatment until these problems are adequately managed. Active drug abuse history and/or a criminal record associated with drug possession, sale, or abuse may also be contraindications.

Psychological Treatment

Psychological/psychiatric treatment services may include the management of a patient's mood and cognitive abnormalities that are of sufficient intensity to complicate recovery, but that do not preclude the patient's responsible participation in a medical rehabilitative care program. For example, a reactively depressed, chronic low back pain patient with significant sleep disorder might be appropriate for a combination of cognitive behavioral psychotherapy and psychotropic medication management.

Psychological treatment should be included with appropriate pharmacological, interventional, surgical and rehabilitation approaches.

Individual Cognitive Behavioral Psychotherapy

Individual cognitive behavioral psychotherapy is an insight-based counseling effort with emphasis on cog-

nitive strategies for life planning, pacing of activities, and acceptance of physical limitations and their emotional consequences. Expectations for patient follow-through with behavioral strategies are a key component of this brief psychological intervention.

Hypnotic Analgesia

Hypnotic analgesia is a specific treatment technique involving the use of hypnosis procedures to reduce and/or eliminate organically-based pain sensations. Practitioners using these techniques require specific training.

Pharmacologic Treatment

See Pharmacotherapy

Vocational Counseling

Vocational counseling is a combination of psychometric and counseling techniques to facilitate reentry to the work place or appropriate avocation with reference to specific physical and emotional limitations secondary to chronic pain.

Group and Family Cognitive Behavioral Psychotherapy

Group and family cognitive behavioral psychotherapy includes techniques as defined previously in Table 5, with the inclusion of selected family members and/or other pain patients.

Biofeedback Treatment

Biofeedback treatment involves the management of specific physiologic changes through the use of electromyographic and other biofeedback instruments. Both diagnostic and direct treatment effects may be expected with this modality, e.g., an index of paraspinal muscle spasm data to corroborate patient reports of pain distribution. A measurable relaxation response with a display of mastery by patients is an expected outcome of this treatment.

INTERVENTIONAL APPROACHES

Interventional pain management techniques should be used in conjunction with other pharmacological, psychological, surgical, and rehabilitation approaches to manage pain. They are generally not used in isolation. The practice of pain management carefully considers the individual, the precise diagnosis, the pathology, the likelihood of improvement, and maintenance of treatment.

- Repeated interventional procedures without substantial and sustained improvements in function are unwarranted.
- Interventional pain management is an important consideration in the diagnosis of the problem causing the pain and provides guidance for appropriate therapy.

Table 5. Common Components of Behavioral and Cognitive-Behavioral Treatment of Persistent Pain

Promotion of a self-management perspective
Relaxation skills training
Cognitive therapy; also known as cognitive restructuring or self-statement analysis
Behavioral activation and management, including goal-setting and pacing strategies
Problem-solving skills training
Other interventions to change perception or emotional response to pain, such as guided imagery, desensitization, hypnosis or attention control exercises
Communication skills training or family interventions
Habit reversal
Maintenance and relapse prevention

Reprinted with permission from McCracken LM, Turk DC. Behavioral and cognitive-behavioral treatment for chronic pain: outcome, predictors of outcome, and treatment process. *Spine*. 2002;27:2564-2573.

Diagnostic Blocks

- Determine the pain generator (specific anatomic source of pain).
- Differentiate local from referred pain.
- Differentiate somatic from visceral pain.
- Determine the sympathetic nervous system contribution to pain.
- Determine whether a painful deformity (e.g., in a limb) is caused by neurally mediated muscle spasm or is a fixed, mechanical deformity. The former may respond to nerve block; the latter will not.
- Differentiate peripheral from central pain.
- Help guide specific therapy, e.g., neuroablative procedures, surgical decompression, spinal fusion, or intradiscal procedures.

Therapeutic Blocks

- By providing anesthesia, therapeutic blocks may facilitate the application of mobilization techniques, which are an important component of therapy.
- Local anesthetic combined with steroids may be useful in treating the inflammatory effects of specific pain syndromes, e.g., radicular pain, rotator cuff injury, tendonitis, bursitis.
- Many therapeutic blocks may also be useful diagnostically.
- Examples:
 - ◆ Myofascial trigger point injections may reduce pain and improve movement.
 - ◆ Selective epidural steroid injections may reduce radicular pain and dysesthesia.

- Facet and/or medial branch blocks may ameliorate certain types of spinal pain.
- Sympathetic nerve blocks may reduce sympathetically-mediated pain.

Neuroaugmentative Procedures (implanted nerve stimulators)

- These modalities may be most effective in the treatment of peripheral neuropathic pain syndromes.
- Candidates for neuroaugmentative implants should undergo a detailed directed physical examination as well as a psychological evaluation to determine suitability and potential success for the procedure.
- Peripheral stimulation may be used to treat pain affecting peripheral nerve structures, e.g., upper or lower limb mononeuropathies, facial neuralgic conditions.
- Spinal cord stimulation may be used to treat neuropathic pain originating at cervical, thoracic, and/or lumbosacral spinal nerve roots or cord.

Intraspinal Drug Delivery Systems (implanted pumps and/or catheters)

- May be useful in treatment of nociceptive pain
- May be particularly useful in some selected patients with chronic back pain
- May provide analgesia with lower side effects, because a lower dose of medication may be required
- Other drugs besides analgesics may be used, e.g., baclofen to control spasticity

Neuroablative Procedures

- Nerve tissue may be destroyed to eliminate the pain generator or to interrupt nociceptive transmission. Examples:
 - Radiofrequency medial branch neurotomy may be used for facet-based spinal pain
 - Chemical or radiofrequency neurolysis of peripheral nerves or nerve terminals
- It is recommended that neuroablative procedures be used cautiously, as they can lead to the development of intractable neuropathic pain.

REHABILITATION APPROACHES

Pain rehabilitation is a useful and cost-effective approach to chronic pain management. It is used in conjunction with pharmacological, psychological, surgical, and interventional approaches. Rehabilitation employs a behaviorally-based, team-driven program to restore lost physical, psychological, and social function for the patient with chronic pain. The pain rehabilitation model makes patients responsible part-

ners in their own progress, enlists the support and assistance of other providers, and places all aspects of treatment into a clear and goal-oriented context.

Principles of Rehabilitation

- Rehabilitation is an important component of pain management. Chronic pain rehabilitation should employ a skilled treatment team to:
 - Restore function
 - Alleviate pain wherever possible
 - Improve pain management skills for the patient with persistent pain
- Chronic pain rehabilitation may be considered an *active* treatment, as opposed to *maintenance*.
 - Active: the patient and team work directly to improve function and reduce pain within a set time frame. Treatment is designed to “cure” or “alleviate” the underlying condition, while improving function.
 - Maintenance: focuses on self-management (e.g., exercise, cognitive-behavioral) and ongoing symptomatic medical intervention. (*This is not intended to describe “maintenance treatment” as used in narcotic treatment programs.*)
- Patient must be motivated to, and capable of, participating.
- Conditions requiring urgent surgical or medical intervention (e.g., neurological emergency, infection) must be ruled out.

Implementation

- Comprehensive assessment: A thorough history and examination lead to clear diagnoses and a structured treatment plan.
- Treatment: Multiple concurrent interventions designed to address all issues.
 - Physical and occupational therapy
 - Exercise—most common treatment method, likely most effective. Different specific exercise programs are appropriate for patients with different pain conditions. They include:
 - Postural training and stabilization
 - Stretching
 - Strengthening
 - Home exercise program—*this is vital*
 - Work conditioning/work hardening
 - Ergonomic modifications
 - Modalities, used in conjunction with active exercise (thermal, massage, electrical stimulation, traction, Transcutaneous Electrical Nerve Stimulator, myofascial release)—transient relief only; use sparingly

- Behavioral/psychological therapy (*See Psychological Therapies*)
- Medications
 - Effective pharmacotherapy may make patients more able to participate in rehabilitation (*See Pharmacotherapy*)
- Injection procedures
 - Trigger point injections may relieve pain and facilitate rehabilitation
 - *See Interventional Approaches*
- Vocational rehabilitation
 - May help patients identify vocational interests and aptitudes through testing
 - May recommend job modifications
 - May help identify new jobs

Monitoring and Outcomes Assessment

The patient's progress toward treatment goals should be periodically reassessed. Goals and time frames are adjusted accordingly. Common structure for patient monitoring is the team conference, where the treatment team meets (with or without the patient present) to compare notes, report on progress, and modify the treatment plan as needed. When planned endpoints are met, the patient should be discharged.

Suggested outcome measures:

- Objective physical measures—range of motion, strength, speed, balance
- Patients' ratings of pain, function, and emotional status
- Standardized instruments assessing quality of life, function, affect, pain impact
- Documentation of improved functional and (where appropriate) vocational performance

Points to measure at discharge:

- Document patient's ability to self-manage condi-

tion; make sure contingency plans for pain flares are in place.

- Referring clinician's understanding of the treatment plan and ability to continue assisting the patient as needed

Consider scheduling a set number of increasingly spaced follow-up visits for monitoring maintenance of gains and/or development of new problems.

SURGICAL APPROACHES

Surgical Indications

- In spinal disorders, sudden or progressive motor loss or neurological deficit is an absolute indication for referral to a spine surgeon.
- Patients with persistent radicular pain after appropriate rehabilitation programs and interventional approaches may be candidates for surgical treatment.
- Consideration should be given to the severity of pain and effects on function.

Documentation

- Document carefully the rationale for surgery in individuals with chronic pain.
- Provide a thorough diagnosis of the pain problem and its effect on the individual's function and quality of life.
- Document the results of pertinent diagnostic studies.
- Document previous unsuccessful non-operative treatments and operative treatment.

Realistic Outcome Expectations

- Communicate outcome expectations carefully to the patient before surgery and document the discussion.
- Emphasize the need for active participation by the patient and continuing self-management after surgery.

Useful Web Sites

National Pain Foundation
www.nationalpainfoundation.org

American Pain Society
www.amppainsec.org

American Academy of Physical Medicine and Rehabilitation
www.aapmr.org

American College of Rheumatology
www.rheumatology.org

American Academy of Family Physicians
www.aafp.org

Wisconsin Medical Society
www.wisconsinmedicalsociety.org

American Academy of Pain Medicine
www.painmed.org

American Pain Foundation
www.painfoundation.org

National Foundation for the Treatment of Pain
www.paincare.org

Chronic Pain Foundation
www.chronicpainfoundation.com

The Mayday Pain Project
www.painandhealth.org

Joint Commission on Accreditation of Healthcare Organizations
www.jcaho.org

International Association for the Study of Pain
www.iasp-pain.org

American Academy of Pain Management
www.aapainmanage.org

American Society for Pain Management Nursing
www.aspmn.org

American Society of Addiction Medicine
www.asam.org

North American Spine Society
www.spine.org

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Appendix I**Confidential Health Questionnaire***Developed by University of Wisconsin Pain Treatment and Research Center*

Thank you for arranging to visit one of our providers. Please complete this questionnaire before coming for your visit. It will be part of your medical history record. The form asks for information about your current problems and your past medical history. This form will give your doctor a better understanding of your problem, and will allow him or her to spend more time discussing treatment plans with you.

When you come for your first visit, please make sure we receive this completed form along with any other medical records, X-rays CT or MRI scans, and other medical information related to your problem. Thank you very much!

Name _____ Date _____

Birth Date _____ Gender: ☐ Male ☐ Female Handedness: ☐ L ☐ R

Home Phone _____ Work Phone _____

Fax _____ Mobile Phone _____

Who referred you to see us? Please include mailing address and phone number. _____

Who is your primary care physician? Please include mailing address and phone number. _____

A. About your pain problem

Do you have:

☐ neck pain ☐ shoulder pain ☐ arm pain ☐ headaches
☐ upper back pain ☐ lower back pain ☐ leg pain ☐ pain all over
☐ other pain complaints: _____

Date pain began: _____ Was onset of pain: (check one) ☐ sudden ☐ gradual

Is pain the result of a work-related injury? ☐ yes ☐ no ☐ unknown

Please describe your problem in detail.

If a motor vehicle accident was involved in the development of your pain, please check the items that apply.

☐ wearing seatbelt ☐ driving ☐ rear-end collision ☐ head-on collision
☐ broadside collision ☐ tailspin ☐ rollover ☐ other _____

When was the accident? _____

Is litigation (legal action) ongoing or pending? If so, please explain. _____

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B. Describe your pain

Please draw a vertical mark (|) on the line below to describe the overall amount of pain you are experiencing today.

no pain	0	1	2	3	4	5	6	7	8	9	10	worst pain imaginable
---------	---	---	---	---	---	---	---	---	---	---	----	-----------------------

Please mark the next line to describe the worst that your pain gets (a bad day).

no pain	0	1	2	3	4	5	6	7	8	9	10	worst pain imaginable
---------	---	---	---	---	---	---	---	---	---	---	----	-----------------------

Please mark the next line to describe the least pain you ever experience (a good day).

no pain	0	1	2	3	4	5	6	7	8	9	10	worst pain imaginable
---------	---	---	---	---	---	---	---	---	---	---	----	-----------------------

Check the boxes that describe your pain:

- | | | | | |
|---------------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| <input type="checkbox"/> Constant | <input type="checkbox"/> Deep | <input type="checkbox"/> Dull | <input type="checkbox"/> Sharp | <input type="checkbox"/> Pulsing |
| <input type="checkbox"/> Intermittent | <input type="checkbox"/> Stiffness | <input type="checkbox"/> Aching | <input type="checkbox"/> Shooting | <input type="checkbox"/> Pressure |
| <input type="checkbox"/> Cramping | <input type="checkbox"/> Burning | <input type="checkbox"/> Throbbing | <input type="checkbox"/> Stabbing | <input type="checkbox"/> Like a tight band |

Is your pain worse (check the box that best applies)

- | | | | |
|---|--|---|---|
| <input type="checkbox"/> At night | <input type="checkbox"/> In the morning | <input type="checkbox"/> End of shift/day | <input type="checkbox"/> Hot, humid days |
| <input type="checkbox"/> No difference day or night | <input type="checkbox"/> Wet/cloudy days | <input type="checkbox"/> Cold days | <input type="checkbox"/> Certain time of year |

If you have headaches:

How many days per month have you had them during the past three months?

- ☐ 0-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ 26-30 ☐ more than one a day
☐ Other, please explain: _____

Do you have any of the following symptoms associated with your headache (check those that apply)?

- | | | | | |
|---|----------------------------------|--|-----------------------------------|--|
| <input type="checkbox"/> Aura | <input type="checkbox"/> Tearing | <input type="checkbox"/> Sensitive to noises | <input type="checkbox"/> Numbness | <input type="checkbox"/> Weakness |
| <input type="checkbox"/> Speech changes | <input type="checkbox"/> Nausea | <input type="checkbox"/> Sensitive to odors | <input type="checkbox"/> Vomiting | <input type="checkbox"/> Sensitive to lights |

What brings on, triggers, or aggravates your headaches (check items that apply)?

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> Weather changes | <input type="checkbox"/> Exercise | <input type="checkbox"/> Missing meals | <input type="checkbox"/> Stress |
| <input type="checkbox"/> Alcohol | <input type="checkbox"/> Menstrual period | <input type="checkbox"/> Ovulation | <input type="checkbox"/> Changes in sleep pattern |
- ☐ Foods (list): _____
 Other: _____

Which of the following activities increase (I) or decrease (D) your pain?

- | | | |
|------------------------------------|---------------------------|-----------------------------|
| ____ Getting out of bed in morning | ____ Standing up | ____ Continuous standing |
| ____ Sitting | ____ Bending backward | ____ Lying on back/side |
| ____ Leaning forward | ____ Coughing/sneezing | ____ Lifting |
| ____ Twisting | ____ Straining | ____ Reaching over |
| ____ Looking up or sideways | ____ Washing/combing hair | ____ Going down stairs/ramp |
| ____ Long car rides | ____ Exercising | ____ Computer work |
| ____ Reading | ____ Walking | ____ Running |
- Other: _____

Do you experience:

- | | | | |
|--|---|---|---|
| <input type="checkbox"/> Numbness | <input type="checkbox"/> Tingling | <input type="checkbox"/> Weakness | <input type="checkbox"/> Clumsiness |
| <input type="checkbox"/> Falls | <input type="checkbox"/> Walking problems | <input type="checkbox"/> Balance problems | <input type="checkbox"/> Spasms |
| <input type="checkbox"/> Limited motion | <input type="checkbox"/> Bowel problems | <input type="checkbox"/> Bladder/urinary problems | <input type="checkbox"/> Sweating changes |
| <input type="checkbox"/> Temperature changes | <input type="checkbox"/> Color changes | <input type="checkbox"/> Hair/nail growth changes | |

C. About your functionWhat aspects of your life can you not perform normally because of your pain? _____

For how long (in minutes or hours) can you continuously: Sit _____ Stand _____ Walk _____

How much, and for how long, can you: Carry: time _____ weight _____
Lift: time _____ weight _____

Do you:

	Yes	No		Yes	No
Sleep soundly	<input type="checkbox"/>	<input type="checkbox"/>	Wake up rested	<input type="checkbox"/>	<input type="checkbox"/>
Have trouble falling asleep	<input type="checkbox"/>	<input type="checkbox"/>	Wake in middle of night	<input type="checkbox"/>	<input type="checkbox"/>
Feel fatigued much of the time	<input type="checkbox"/>	<input type="checkbox"/>	Take sleeping medication	<input type="checkbox"/>	<input type="checkbox"/>

How would you describe your emotional health (check all that apply to you)?

<input type="checkbox"/> happy/cheerful	<input type="checkbox"/> optimistic	<input type="checkbox"/> anxious	<input type="checkbox"/> worried	<input type="checkbox"/> angry
<input type="checkbox"/> depressed	<input type="checkbox"/> suicidal	<input type="checkbox"/> compulsive	<input type="checkbox"/> indifferent	<input type="checkbox"/> hopeless
<input type="checkbox"/> frustrated	<input type="checkbox"/> panicked			

D. Previous evaluation and treatment

What tests have been done to investigate your current problems?

	Test	Dates	Where (what clinic hospital)?
<input type="checkbox"/> Plain x-rays	_____	_____	_____
<input type="checkbox"/> CT scan (CAT scan)	_____	_____	_____
<input type="checkbox"/> MRI scan	_____	_____	_____
<input type="checkbox"/> Myelogram	_____	_____	_____
<input type="checkbox"/> EMG/nerve conduction studies	_____	_____	_____
<input type="checkbox"/> Thermogram	_____	_____	_____
<input type="checkbox"/> Functional capacity evaluation (FCE)	_____	_____	_____
<input type="checkbox"/> EEG (electroencephalogram)	_____	_____	_____
<input type="checkbox"/> Spinal tap or lumbar puncture	_____	_____	_____
<input type="checkbox"/> Other	_____	_____	_____

Please list your prior pain-related surgeries. If there is not enough room, attach a separate sheet of paper.

Date	Surgery	Reason (symptoms)	Surgeon
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Did your symptoms improve after your most recent surgery? ☐ Yes ☐ NoWhich symptoms got better? _____

_____Did you get worse after surgery? ☐ Yes ☐ NoIf yes, please explain. _____

What nonsurgical treatments have you received for this condition?

Write ↑ if helped, ↓ if made you worse, — if no difference.

Treatment	Helped?	Treatment	Helped?
<input type="checkbox"/> Heat, ice, ultrasound	_____	<input type="checkbox"/> Pain medication	_____
<input type="checkbox"/> Traction	_____	<input type="checkbox"/> Biofeedback, relaxation training	_____
<input type="checkbox"/> Braces, splints, magnets, taping	_____	<input type="checkbox"/> Chronic pain program	_____
<input type="checkbox"/> TENS unit	_____	<input type="checkbox"/> Acupuncture	_____
<input type="checkbox"/> Stretching exercises	_____	<input type="checkbox"/> Other alternative therapies	_____
<input type="checkbox"/> Treadmill	_____	<input type="checkbox"/> Trigger point injections	_____
<input type="checkbox"/> Pool/aquatic therapy	_____	<input type="checkbox"/> Nerve blocks/spinal injections	_____
<input type="checkbox"/> Work hardening	_____	<input type="checkbox"/> Spinal stimulator	_____
<input type="checkbox"/> Back school	_____	<input type="checkbox"/> Implanted pump	_____
<input type="checkbox"/> Craniosacral therapy	_____	<input type="checkbox"/> Prolotherapy	_____
<input type="checkbox"/> Feldenkrais therapy	_____	<input type="checkbox"/> Other injections	_____
<input type="checkbox"/> Massage	_____	<input type="checkbox"/> Other treatments	_____

E. About your past medical history

Please check the box for all areas where you have (or once had) problems.

HEAD/NECK

- ☐ Glaucoma
- ☐ Eye/vision problems
- ☐ Hearing or balance problems
- ☐ Nose/Sinus problems
- ☐ Throat/Neck problems
- ☐ Jaw/Teeth problems
- ☐ Other: _____

SKIN

- ☐ Rashes
- ☐ Sores/ulcers
- ☐ Eczema/allergic dermatitis
- ☐ Other: _____

MUSCLES/BONES/JOINTS

- ☐ Broken bones
- ☐ Arthritis
- ☐ Joint swelling or stiffness
- ☐ Very flexible; "double-jointed"
- ☐ Muscle pain
- ☐ Fatigue
- ☐ Morning stiffness
- ☐ Other: _____

OB/GYN

- ☐ Pelvic pain
- ☐ First menstrual period at age _____
- ☐ Last menstrual period began _____
- ☐ Menstrual problems
- ☐ Menopause

LUNGS/CHEST

- ☐ Shortness of breath
- ☐ Cough
- ☐ Chest pains
- ☐ Asthma/emphysema
- ☐ Hay fever/allergies
- ☐ Pneumonia
- ☐ Other: _____

NERVES/BRAIN

- ☐ Headache
- ☐ Dizziness
- ☐ Seizures
- ☐ Stroke
- ☐ Brain injury
- ☐ Spinal cord injury
- ☐ Tremor
- ☐ Double vision
- ☐ Loss of consciousness
- ☐ Brain tumor
- ☐ Multiple Sclerosis
- ☐ Other: _____

CONSTITUTIONAL

- ☐ Fevers
- ☐ Chills
- ☐ Night sweats
- ☐ Weight loss
- ☐ Weight gain
- ☐ Other: _____

URINARY/GENITAL

- ☐ Kidney stones
- ☐ Urinary infections
- ☐ Kidney failure/dialysis
- ☐ Trouble urinating
- ☐ Loss of urine control
- ☐ Sexual difficulties
- ☐ Other: _____

CARDIOVASCULAR

- ☐ High blood pressure
- ☐ Heart surgery
- ☐ Chest pains/angina
- ☐ Heart attack
- ☐ Heart murmur
- ☐ Irregular heartbeat
- ☐ Blood clots in legs or arms
- ☐ Mitral valve prolapse
- ☐ Nonhealing sores
- ☐ Poor circulation
- ☐ Leg or arm swelling
- ☐ Other: _____

SPINE

- ☐ Neck injury or pain
- ☐ Back injury or pain
- ☐ Disc disease
- ☐ Fracture
- ☐ Scoliosis
- ☐ Other: _____

PSYCHOLOGICAL

- ☐ Depression
☐ Anxiety/Panic
☐ Suicide attempt or gesture
☐ Psychiatric hospitalization
☐ Schizophrenic or bipolar
☐ Counseling
☐ Victim of abuse
☐ Other: _____

ENDOCRINE

- ☐ Diabetes
☐ Thyroid problems
☐ Other: _____

STOMACH / ABDOMEN

- ☐ Heartburn or ulcers
☐ Diarrhea
☐ Constipation
☐ Trouble swallowing
☐ Loss of bowel control
☐ Red or black in stools
☐ Nausea or vomiting
☐ Stomach upset from medicine
☐ Irritable bowel syndrome

STOMACH / ABDOMEN

- ☐ Anemia ("low blood")
☐ Swollen glands or nodes
☐ Cancer
☐ Easy bleeding/bruising
☐ Transfusions
☐ Nasal polyps
☐ Transplant patient
☐ Other: _____

- ☐ Anesthesia problems in past
☐ HIV infection
☐ Artificial heart valve, pacemaker,
 defibrillator, coronary stents

- ☐ Taking seizure medication
☐ Need prophylactic antibiotics
 before procedures
☐ Immunosuppressed

- ☐ Pregnant or breastfeeding
☐ Taking Coumadin, warfarin,
 Ticlid, aspirin, heparin, Plavix
☐ Hepatitis infection

If involved in counseling, please list your psychiatrist, psychologist, and/or therapist and their addresses. _____

Please list any other major illnesses you have not mentioned earlier. Give dates. _____

Please list any operations or surgeries you have not mentioned earlier. Give dates. _____

F. About your medications

ALLERGIES: Please list any medications you cannot take because of allergies or other problems. Please tell us what reaction you had to each drug. _____

Are you allergic to iodine or contrast dye (for IVP, myelogram, etc.)? ☐ Yes ☐ No

Please list all medications you are currently taking, with their doses and number of times taken per day. Please include "over the counter" drugs, birth control pills, and vitamins/supplements/herbals and any medications you use "as needed" rather than daily. _____

G. About your family's medical history

If any of your family members have major medical problems, please list them here. Include headaches, pain problems, arthritis, unusual joint flexibility. Please also include cancer, heart disease, stroke, high blood pressure, diabetes, seizures, substance abuse problems, psychological illnesses, and others. _____

H. About your life

What is your present or previous occupation? _____

Do you work: ☐ Full time? ☐ Part time? ☐ Light or limited duty? Explain: _____

How long have/had you been at this job? _____ How much do/did you like it? _____

Have you been off work because of your pain in the past? ☐ Yes ☐ No If so, how many times and for how long? _____

How many hours per day does your job require you to:

<input type="checkbox"/> Sit _____	<input type="checkbox"/> Stand _____	<input type="checkbox"/> Walk _____	<input type="checkbox"/> Bend/stoop _____
<input type="checkbox"/> Drive _____	<input type="checkbox"/> Reach _____	<input type="checkbox"/> Use power tools _____	Which ones _____
<input type="checkbox"/> Carry, push, pull _____	How heavy _____	<input type="checkbox"/> Lift _____	How heavy _____
<input type="checkbox"/> Work at computer _____	<input type="checkbox"/> Work under fluorescent lights _____		
<input type="checkbox"/> Work with chemicals or fumes _____			

Please answer these questions if you are not working outside the home.

When did you last work, and why did you stop? _____

How do you spend your day? _____

What is your source of income? _____

Do you plan to: ☐ Return to your old job? ☐ Take a different job? ☐ Not return to work?

How far did you go in school? _____ Were you in the military? ☐ Yes ☐ No

Are you: ☐ married ☐ single ☐ divorced ☐ separated ☐ widowed

Have you any children? If so, how many and what ages? _____

Who lives at home with you? _____

Do you currently:	If yes, how much and for how long?	If no, did you in the past?	If yes, how much and for how long?
Smoke? <input type="checkbox"/> Yes <input type="checkbox"/> No	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Use alcohol? <input type="checkbox"/> Yes <input type="checkbox"/> No	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Use illegal drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Use caffeine? <input type="checkbox"/> Yes <input type="checkbox"/> No	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____

Have you ever had a problem with alcohol or drug use? ☐ Yes ☐ No

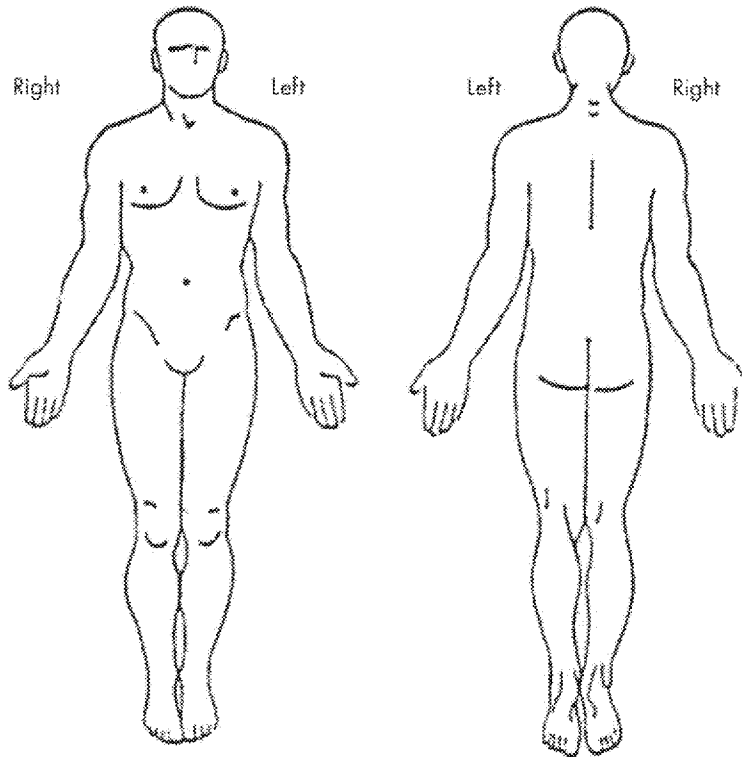
If yes, please explain. _____

I. Draw your pain

Please use colored markers to draw the location of your pain on the body diagram.

Aches = Yellow
Burning = Blue
Stabbing = Red
Numbness = Black
Pins & Needles = Green

Put a star (*) over the most painful point on your body.



J. Final Questions

What do you think is causing your pain? _____

What do you want to accomplish with your visit to us? _____

Is there anything else you would like to tell us? _____

Thank you! Please sign below. If **unable to sign**, please have a parent, guardian, or other responsible party sign below and give the reason you are unable to sign.

Signature Date and Time

Reason patient unable to sign: _____

PROVIDER DECLARATION: I have reviewed this document in detail and have discussed its contents with the patient. (Provider sign and date below)

Provider's Signature Date and Time

Appendix II

Equianalgesic Dosing Table

Equianalgesic Dosing Table			
Drug	Parenteral	PO	Duration of action (hr)
Morphine*	10	30	3-4
Hydromorphone (Dilaudid)	1.5	7.5	3-4
Codeine†	130	200	3-4
Hydrocodone‡(Vicodin, Vicoprofen, Lortab, Lorcel)	—	30	3-4
Oxycodone* (Roxicodone, Roxicet§, Percocet§)	Not available in U.S.	20-30	3-4
Meperidine¶(Demerol)	75	300	3-4
Levorphanol (Leva-Dromoran)	2	4	3-4
Methadone (Dolophine)	10	3-5#	4-12
Fentanyl (Sublimaze) (Duragesic**)	0.1**	—	1-3††

* Controlled-release formulations of morphine and oxycodone have durations of action 8-12 hours or even longer.

† Codeine doses should not exceed 1.5 mg/kg because of an increased incidence of side effects with higher doses.

‡ These products contain 5, 7.5, or 10 mg of hydrocodone with aspirin, acetaminophen, or ibuprofen.

§ These products contain 2.5, 5, 7.5, or 10 mg of oxycodone with aspirin or acetaminophen.

¶ Avoid multiple dosing with meperidine (no more than 48 hrs or at doses greater than 600 mg/24 hours). Accumulation of toxic metabolite normeperidine (half-life 12-16 hours) can lead to CNS excitability and convulsions. Contraindicated in patients receiving MAO inhibitors.

Although many equianalgesic tables list 20 mg as the PO oral methadone equianalgesic dose, recent data suggest methadone is much more potent with repetitive dosing. Ratios between PO morphine and PO methadone may range from 4-14:1.

** Transdermal fentanyl 100 µg/hr is approximately equivalent to 2-4 mg/hr of IV morphine. A conversion factor for transdermal fentanyl that can be used for equianalgesic calculation is 17 µg/hr. The dose of transdermal fentanyl in µg/hr is approximately one-half of the 24-hour dose of oral morphine.

†† Single dose data. Continuous intravenous infusion produces lipid accumulation and prolonged terminal excretion.

Adapted with permission from Weissman DE, Dahl JL, Dinndorf PA. *Handbook of Cancer Pain Management*. 5th ed. Wisconsin Cancer Pain Initiative. 1996.

Appendix III

Guidelines For Treatment with Controlled Substance Medications

Developed by UW Pain Treatment and Research Center

This document is about your use of controlled substance medications prescribed by your physician. These medications are being used to relieve pain and improve function. Most patients who use these drugs find them very helpful and use them without problems. We have found that it helps patients when we establish a clear understanding at the beginning of therapy concerning the use of these medicines. This document should help you to understand our medication policies and your role as part of the pain treatment team.

By signing below, you acknowledge that you have received, read, and understood the following guidelines. You agree to follow the guidelines and understand that failure to follow these guidelines can result in discontinuance of medications.

Patient Signature

Date and Time

Physician Signature

Date and Time

Other Provider Signature

Date and Time

These guidelines apply to all controlled substances including opioid pain medicines, some anti-anxiety medications, and tranquilizers. "Medications" refers to these substances. These guidelines do not apply to other drugs used for other purposes. "Provider" refers to the physician or other medical professional who has agreed to prescribe your medications.

1. You are responsible for your medications. You are expected to take them only as prescribed by your provider. Please communicate any questions or concerns, such as side effects or dose questions, to your provider or nurse.
2. All your pain medications should be prescribed only by your provider. You should get them from a single pharmacy.

Provider Name: _____

Pharmacy Name: _____

Clinic Phone Number: _____

Pharmacy Phone Number: _____

You should not obtain medications from other doctors or pharmacies, unless you are a patient in the hospital. You should tell any hospital or emergency room doctors that you receive pain medications from your provider. Have your dentist contact your provider before giving you medications. These guidelines are designed to protect you from the danger of receiving too much medication.

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3. You may not change your medication dose without first getting your provider's permission. Changing the dose without permission may endanger your health. Your provider will give you instructions about what to do if the office is not open when you need advice.
4. You are expected to make sure that your prescriptions are filled on time. You will be given enough medication to last a fixed amount of time, usually 30 days. Refills can only be given during regular office hours, in person, during a scheduled visit. To avoid interruption in your medications, please schedule regular appointments for medication refill. Make sure that you schedule each appointment far enough in advance to avoid running out of medications. Prescriptions cannot be filled early. Prescriptions will not be sent by mail, faxed, or filled by telephone request.
5. Keep your pain medications in a safe and secure place. We advise that you keep them in a locked cabinet or safe. You are expected to protect your medications from loss or theft. Stolen medications should be reported to the police and to your provider immediately. If your medications are lost, misplaced, or stolen, your provider may choose to taper and discontinue the medications.
6. You may not give or sell your medications to any other person under any circumstances. If you do so, you may endanger that person's health. It is also against the law.
7. You should not use alcohol or illegal drugs while taking these medications. You should not use sleeping pills, cold medicines, or other medications that might cause drowsiness, dizziness, or changes in thinking unless you first discuss them with your provider.
8. You should not drive or operate heavy machinery if you feel tired, mentally foggy, or are experiencing other side effects from your medications. It is your responsibility to keep yourself and others from harm.
9. It is sometimes necessary for your provider to check your medication levels. At such times, you may be asked to provide blood and/or urine specimens for testing.
10. Your medications are only a portion of a larger treatment plan. We ask that you participate fully in treatment and follow your providers' advice regarding physical therapy, psychotherapy, vocational rehabilitation, counseling, other medications, or other prescribed or recommended treatment.
11. So that your other doctors understand and can help with your treatment, we ask that you let your provider contact other providers and pharmacists about your use of medications.
12. These medications are very helpful to many patients but are not right for everybody. It is sometimes necessary for a provider to stop prescribing these medications for a patient. Your provider might choose to taper and discontinue your medications if:
 - The treatment is not helpful.
 - The treatment loses its effectiveness.
 - You have serious side effects from the medication.
 - You become less able to function physically, socially, or emotionally as a result of the treatment.
 - You are unable to follow the other guidelines listed in this document.
13. If your medications must be stopped for any reason, your provider will taper you off the medications (slowly decrease the dose) in a controlled fashion to avoid withdrawal symptoms. Your provider may consult a specialist if s/he feels additional help is needed to accomplish a safe taper.
14. *For women only:* Your use of these medications may adversely affect a fetus if you are pregnant, or a child if you are breastfeeding. If you are pregnant or breastfeeding now, or if you are considering becoming pregnant, you should discuss your use of these (and any other) medications with your primary provider or obstetrician.

Thank you. We look forward to working with you to help relieve your pain and improve your function.

Appendix IV

Wisconsin Controlled Substances Laws and Regulations

1. Controlled substances are drugs that come under the jurisdiction of federal and state controlled substances laws because they have the potential to be abused. The laws specify five categories (schedules) of drugs. Most opioid analgesics are in Schedules II and III. Licensed physicians or advanced practice nurses who wish to prescribe, administer, or dispense controlled substances must register with the DEA and comply with federal and state laws and regulations.
2. When prescribing controlled substances, the following must be included on the prescription order:
 - ◆ Patient's name and address
 - ◆ Physician's name, address, and DEA registration number
 - ◆ Physician's signature
 - ◆ Name and quantity of drug prescribed and directions for use
3. Schedule II opioids include morphine, hydromorphone, methadone, levorphanol, fentanyl, codeine, oxycodone, and combination products that contain oxycodone with aspirin or acetaminophen. Limitations on prescription orders for Schedule II drugs include:
 - ◆ Written prescription orders are required except for emergencies; in emergencies oral prescription orders are permitted, but with two restrictions: the amount of drug prescribed verbally must be limited to the amount needed to treat the patient during the emergency period, and a written prescription order must be received by the pharmacist within 7 days.
 - ◆ Written prescriptions may be transmitted by fax, but the written prescription must be presented at the time the drug is dispensed. However, infusion pharmacies and pharmacies that service long-term care facilities can consider the fax a "written prescription."
 - ◆ Prescription orders are only valid for seven days from the date issued
 - ◆ No refills are allowed
 - ◆ The quantity of drug dispensed is limited to a 34-day supply
4. Schedule III and IV analgesics include combination products that contain codeine or propoxyphene and aspirin or acetaminophen. Benzodiazepines are in Schedule IV. Limitations on prescription orders for Schedule III and IV drugs include:
 - ◆ Prescription orders are valid for 6 months from the date issued
 - ◆ Maximum of 5 refills is allowed within 6 months of issuance of the prescription
 - ◆ The quantity of drug prescribed is limited to a 34-day supply
5. Partial dispensing of Schedule II drugs is allowed to patients who are terminally ill or in long-term care facilities; the remainder of the drug must be dispensed within 60 days of the prescription date. The phrase "terminal illness" should appear on the face of the prescription.

Source: Chapter 961 Uniform Controlled Substances Act, Chapter 450 Pharmacy Examining Board

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State *in* End-of-Life Care

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Focus: Pain Management

Advances in State Pain Policy and Medical Practice

INSIDE

- Pain Undertreatment:
"A Strikingly Large
Problem"

PAGE 2

- Removing Legislative
Barriers
to Pain Treatment

PAGE 4

- Bringing Better Pain
Management into
"Ordinary Medical
Practice"

PAGE 6

- Public Education

PAGE 8



States highlighted in red
have medical board policies
relating to the use of
controlled substances for
pain management (see p. 6).

Source: Pain and Policy Studies Group,
University of Wisconsin-Madison
(www.medsch.wisc.edu/painpolicy).



Ann Jackson

A patient with pancreatic cancer uses the treadmill while controlling his pain with maximum doses of Percocet (oxycodone/acetaminophen). This patient died four months later while on hospice care in California.

Pain Undertreatment: “A Strikingly Large Problem”

A Rhode Island woman who has had breast cancer for the past 12 years experienced a painful recurrence. Just a few months into treating the recurrence, her physician, Joan Teno, M.D., initiated a regular morphine treatment regimen for her pain, a move Teno says families and her colleagues often resist. But for two-and-a-half years, morphine “has provided this patient with a high quality of life,” Teno says. Teno, a practitioner and researcher, believes her patient would not be living so long and productively if she were in daily pain.

Like many pain experts, Teno believes early, aggressive pain treatment lengthens life—the opposite of what so many patients, families, and medical practitioners assume. “Being in severe pain takes over everything. You do nothing but focus on that pain,” Teno says. “With opioids, things become tolerable.”

“Opioids” are pain medications, like morphine, derived from opium, or synthesized to behave like opium derivatives. Opioids are commonly known as narcotics, a law-enforcement term whose connotations make many pain-policy reform advocates, including Teno, bristle, because opioids prescribed appropriately and knowledgeably don’t have the implied effects of stupor and addiction.

Like most opioids, morphine has no dosage ceiling, and some patients need 1,000 mg or more every hour to reduce the pain to a level at which they can function, says Joanne Lynn, M.D., director of the Center to Improve Care of the Dying. But many physicians fear they’ll lose their licenses by prescribing opioids in such staggeringly high doses and, as in the case of Teno’s patient, for more than a brief time.

Because of cultural misperceptions and ignorance about opioids, patients and their families are often reluctant to accept them and physicians are reluctant to prescribe them early and aggressively. The result is widespread undertreatment of pain. Studies and policy statements confirm the undertreatment of many kinds of pain in a variety of settings. In its 1994 guidelines on cancer pain management, the Agency for Health Care Policy and Research (AHCPR) stated that 90 percent of cancer pain could be controlled “through relatively simple means”—with existing, and legal, medications. In 1995, the Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatment (SUPPORT) found that among patients with life-threatening illness who were conscious, half of them said, by their families’ report, that they spent most of their last few days in moderate to severe pain.

But undertreatment of pain persists as “a strikingly large problem,” Teno says. A study published last year in the *Journal of the American Medical Association* found that 39 percent of elderly cancer patients in nursing homes experienced daily pain, but only 12 percent received treatment. The study did not rate the patients’ level or kind of pain, “but we do know that these were patients with cancer and with daily pain,” Teno says. “A person with cancer pain should receive treatment. I find this outrageous, shocking, and scandalous.”

Myths and Fears About Opioids

Though most pain-treatment experts agree that existing medications, including opioids, can control most kinds of pain, the public continues to equate them with addiction and death. “I get a lot of family members who say, ‘I trust your services, I read the literature you’ve given us, and on an intellectual

“Addiction among patients who use opioids for pain management is exceedingly rare.”

David Joranson, M.S.S.W.,
Pain and Policy Studies Group

